

District I
1625 N. French Dr., Hobbs, NM 88240

District II
1301 W. Grand Avenue, Artesia, NM 88210

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised October 12, 2005
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

RCVD SEP 29 '08
☒ AMENDED REPORT
"As DRILLED"

WELL LOCATION AND ACREAGE DEDICATION PLAT OIL CONS. DIV.
DIST. 3

*API Number 30-039-30185		*Pool Code 97232 / 72319 / 71599		*Pool Name BASIN MANCOS / BLANCO MESAVERDE / BASIN DAKOTA	
*Property Code 17033		*Property Name ROSA UNIT			*Well Number 187C
*GRID No. 120782		*Operator Name WILLIAMS PRODUCTION COMPANY			*Elevation 6801'

¹⁰ Surface Location

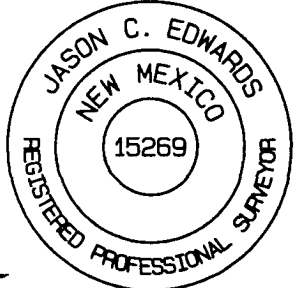
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	21	31N	5W		1090	SOUTH	1145	WEST	RIO ARRIBA

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	21	31N	5W		1724	SOUTH	922	WEST	RIO ARRIBA

¹² Dedicated Acres 320.0 Acres - (W/2)	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16 5287.26' LEASE SF-078769 5280.00' BOTTOM-HOLE LAT: 36.88255°N LONG 107.37354°W DATUM: NAD83 922' N19°51.2'W 671.5' 1145' 1724' 1090' SURFACE LOCATION LAT: 36.88081°N LONG 107.37277°W DATUM: NAD83 2643.30'	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division. <i>Larry Higgins</i> 9-26-08 Signature Date LARRY HIGGINS Printed Name 18 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief. Date Revised: SEPTEMBER 25, 2008 Date of Survey: MAY 4, 2006 Signature and Seal of Professional Surveyor  JASON C. EDWARDS Certificate Number 15269
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ROSA UNIT #187 C
RIO ARRIBA CO., NEW MEXICO

SECTION DETAILS

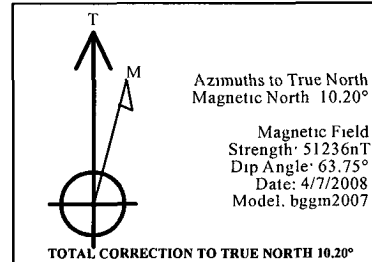
Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0 00	0 00	344 02	0 00	0 00	0 00	0 00	0 00	0 00	
2	500 00	0 00	344 02	500 00	0 00	0 00	0 00	0 00	0 00	
3	848 37	10 45	344 02	846 44	30 46	-8 73	3 00	344 02	31 68	
4	3523 42	10 45	344 02	3477 11	496 94	-142 36	0 00	0 00	516 93	
5	4220 17	0 00	344 02	4170 00	557 86	-159 81	1 50	180.00	580 30	Int Csg
6	8760 17	0 00	344 02	8710 00	557 86	-159 81	0 00	344 02	580 30	

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
#187 C	0 00	0 00	2140269 54	2857795 81	36°52'50 920N	107°22'21 970W	N/A

TARGET DETAILS

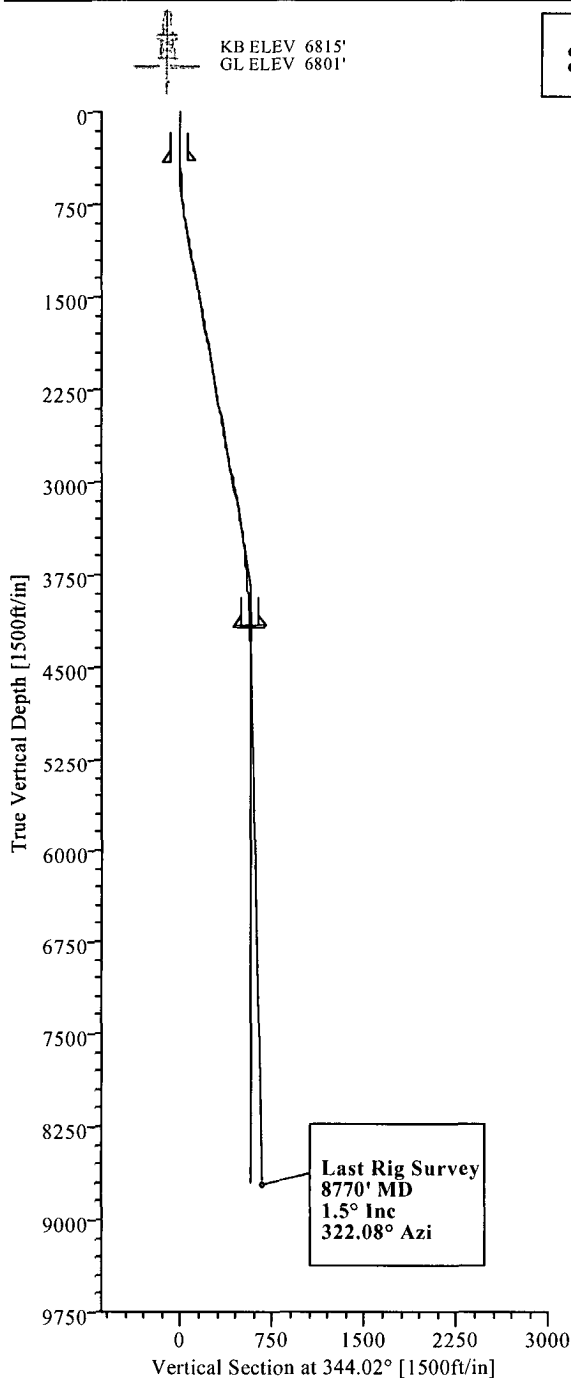
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
Int Csg	4170 00	557 86	-159 81	36°52'56 436N	107°22'23.937W	Point



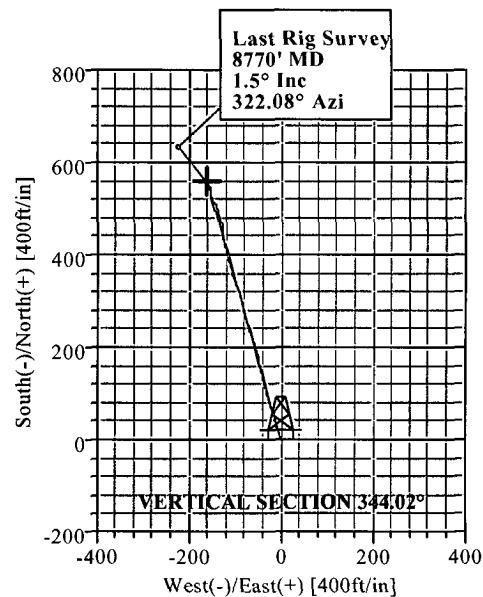
SITE DETAILS

Rosa Unit # 187 C
1090' FSL 1145' FWL of SEC 21, T-31-N, R-5-W
Site Centre Latitude 36°52'50 920N
Longitude 107°22'21 970W
Ground Level: 6801 00
Positional Uncertainty 0 00
Convergence 0 28

RCVD SEP 29 '08
OIL CONS. DIV.
DIST. 3



LEGEND
#187 C, Plan #1
WFT SVY



FIELD DETAILS

Rio Arriba County (NAD 83)
Geodetic System US State Plane Coordinate System 1983
Ellipsoid GRS 1980
Zone New Mexico, Western Zone
Magnetic Model bggm2007
System Datum Mean Sea Level
Local North True North

Survey: WFT SVY (#187 C/1)

Created By: Lindsey Maddux

Date: 9/22/2008



Weatherford International, Inc.

Survey Report

Company: WILLIAMS PRODUCTION Date: 9/22/2008 Time: 13:46:05 Page: 1
 Field: Rio Arriba County (NAD 83) Co-ordinate(NE) Reference: Well: #187 C, True North
 Site: Rosa Unit # 187 C Vertical (TVD) Reference: SITE 6815.0
 Well: #187 C Section (VS) Reference: Well (0.00N,0.00E,344.02Azi)
 Wellpath: 1 Survey Calculation Method: Minimum Curvature Db: Sybase

Field: Rio Arriba County (NAD 83)

Map System: US State Plane Coordinate System 1983
 Geo Datum: GRS 1980
 Sys Datum: Mean Sea Level

Map Zone: New Mexico, Western Zone
 Coordinate System: Well Centre
 Geomagnetic Model: bggm2007

Site: Rosa Unit # 187 C

1090' FSL 1145' FWL of SEC 21, T-31-N, R-5-W

Site Position: Northing: 2140269.54 ft Latitude: 36 52 50.920 N
 From: Geographic Easting: 2857795.81 ft Longitude: 107 22 21.970 W
 Position Uncertainty: 0 00 ft North Reference: True
 Ground Level: 6801.00 ft Grid Convergence: 0.28 deg

Well: #187 C

Slot Name:

Well Position: +N/-S 0 00 ft Northing: 2140269.54 ft Latitude: 36 52 50.920 N
 +E/-W 0 00 ft Easting: 2857795.81 ft Longitude: 107 22 21.970 W
 Position Uncertainty: 0 00 ft

Wellpath: 1

Drilled From: Surface
 Tie-on Depth: 0.00 ft
 Above System Datum: Mean Sea Level
 Declination: 10.20 deg
 Mag Dip Angle: 63.75 deg
 +E/-W Direction
 ft deg

Current Datum: SITE Height 6815.00 ft
 Magnetic Data: 4/7/2008
 Field Strength: 51236 nT
 Vertical Section: Depth From (TVD) +N/-S
 ft ft
 0.00 0.00 0.00 344.02

Survey: WFT SVY

Start Date: 7/28/2008

Company: Weatherford International Ltd.
 Tool: MWD;MWD - Standard

Engineer: Jayme Wilson
 Tied-to: From Surface

Survey: WFT SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0 00	MWD
509.00	0.81	8.45	508.98	3.56	0.53	3.28	0.16	0.16	0 00	MWD
540.00	1.38	354.08	539.98	4.15	0.52	3.84	2 03	1.84	-46.35	MWD
570.00	2.00	346.20	569.96	5.01	0.36	4.72	2 20	2.07	-26.27	MWD
601.00	2.75	340.70	600.94	6.24	-0 01	6 00	2.53	2.42	-17.74	MWD
632.00	3.56	337.83	631.89	7.83	-0.62	7 70	2.66	2.61	-9.26	MWD
663.00	4 44	337.20	662.81	9.83	-1.45	9 85	2.84	2.84	-2 03	MWD
694.00	5.50	337 20	693.70	12 31	-2.49	12.52	3.42	3.42	0 00	MWD
725.00	6.50	338.95	724 53	15.32	-3.70	15.74	3.28	3 23	5 65	MWD
755 00	7.50	339.20	754.30	18.73	-5.00	19.38	3.33	3.33	0 83	MWD
786.00	8.25	340.33	785.01	22.72	-6 47	23.62	2.47	2.42	3.65	MWD
817.00	8.94	341 20	815.66	27 09	-8.00	28.25	2.26	2.23	2 81	MWD
848.00	9.69	341.83	846.25	31.85	-9.59	33.26	2.44	2.42	2.03	MWD
879.00	9.69	341.58	876 81	36.80	-11 22	38.47	0.14	0.00	-0 81	MWD
910 00	9.75	343.08	907.37	41 79	-12.81	43.70	0 84	0 19	4.84	MWD
942.00	10.25	343.70	938.88	47.12	-14.40	49.26	1.60	1 56	1.94	MWD
973.00	10 38	343.45	969.38	52.44	-15.97	54.81	0.44	0.42	-0 81	MWD
1003 00	10.44	343.33	998.88	57.63	-17.52	60 23	0.21	0.20	-0 40	MWD
1035.00	10.75	342.08	1030 34	63.25	-19 27	66.11	1.21	0.97	-3.91	MWD
1066.00	10.81	342.95	1060.79	68 78	-21.01	71.91	0.56	0.19	2.81	MWD
1098 00	10.69	343 45	1092.23	74.50	-22.74	77.88	0.47	-0 37	1.56	MWD
1129 00	10.69	342.83	1122.69	80.00	-24.40	83.63	0.37	0.00	-2 00	MWD
1161.00	10 81	343.58	1154 13	85.71	-26.13	89 59	0.58	0.37	2 34	MWD
1193.00	10.50	345.58	1185 58	91.42	-27 70	95.51	1.51	-0.97	6 25	MWD



Weatherford International, Inc.

Survey Report

Company: WILLIAMS PRODUCTION
Field: Rio Arriba County (NAD 83)
Site: Rosa Unit # 187 C
Well: #187 C
Wellpath: 1

Date: 9/22/2008 Time: 13:46:05 Page: 2
Co-ordinate(NE) Reference: Well: #187 C, True North
Vertical (TVD) Reference: SITE 6815.0
Section (VS) Reference: Well (0.00N,0.00E,344.02Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: WFT SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
1225.00	10.56	345.33	1217.04	97.08	-29.17	101.36	0.24	0.19	-0.78	MWD
1256.00	10.50	343.33	1247.52	102.53	-30.70	107.02	1.19	-0.19	-6.45	MWD
1285.00	10.81	343.33	1276.02	107.67	-32.24	112.38	1.07	1.07	0.00	MWD
1317.00	10.56	344.20	1307.46	113.36	-33.90	118.31	0.93	-0.78	2.72	MWD
1348.00	10.56	344.33	1337.94	118.83	-35.44	124.00	0.08	0.00	0.42	MWD
1380.00	10.69	343.70	1369.39	124.50	-37.06	129.90	0.54	0.41	-1.97	MWD
1411.00	10.75	344.70	1399.85	130.05	-38.63	135.66	0.63	0.19	3.23	MWD
1442.00	10.69	346.08	1430.31	135.63	-40.09	141.43	0.85	-0.19	4.45	MWD
1473.00	10.88	347.08	1460.76	141.27	-41.43	147.22	0.86	0.61	3.23	MWD
1505.00	10.56	348.58	1492.20	147.09	-42.69	153.16	1.33	-1.00	4.69	MWD
1536.00	10.50	347.33	1522.68	152.63	-43.87	158.81	0.76	-0.19	-4.03	MWD
1567.00	10.75	349.83	1553.15	158.23	-45.00	164.51	1.69	0.81	8.06	MWD
1598.00	10.38	348.08	1583.62	163.81	-46.09	170.17	1.58	-1.19	-5.65	MWD
1630.00	10.25	346.45	1615.11	169.40	-47.35	175.89	1.00	-0.41	-5.09	MWD
1662.00	10.31	346.58	1646.59	174.95	-48.68	181.59	0.20	0.19	0.41	MWD
1692.00	10.38	345.33	1676.10	180.18	-49.99	186.98	0.78	0.23	-4.17	MWD
1724.00	10.38	345.08	1707.58	185.75	-51.46	192.74	0.14	0.00	-0.78	MWD
1753.00	10.56	344.95	1736.10	190.84	-52.83	198.01	0.63	0.62	-0.45	MWD
1785.00	10.50	344.08	1767.56	196.48	-54.39	203.86	0.53	-0.19	-2.72	MWD
1815.00	10.75	344.58	1797.05	201.80	-55.88	209.39	0.89	0.83	1.67	MWD
1846.00	10.75	342.83	1827.50	207.35	-57.50	215.17	1.05	0.00	-5.65	MWD
1877.00	10.50	341.95	1857.97	212.80	-59.23	220.89	0.96	-0.81	-2.84	MWD
1908.00	10.56	340.20	1888.45	218.16	-61.07	226.54	1.05	0.19	-5.65	MWD
1940.00	10.63	339.33	1919.90	223.68	-63.10	232.41	0.55	0.22	-2.72	MWD
1971.00	10.63	340.33	1950.37	229.05	-65.08	238.11	0.60	0.00	3.23	MWD
2003.00	10.38	341.45	1981.83	234.56	-66.99	243.94	1.01	-0.78	3.50	MWD
2034.00	10.06	343.95	2012.34	239.81	-68.62	249.44	1.76	-1.03	8.06	MWD
2066.00	10.00	343.58	2043.85	245.16	-70.18	255.01	0.28	-0.19	-1.16	MWD
2097.00	10.19	343.33	2074.37	250.37	-71.73	260.44	0.63	0.61	-0.81	MWD
2129.00	10.25	342.83	2105.87	255.80	-73.38	266.12	0.33	0.19	-1.56	MWD
2160.00	10.38	342.58	2136.36	261.10	-75.03	271.67	0.44	0.42	-0.81	MWD
2191.00	10.44	343.45	2166.85	266.46	-76.67	277.27	0.54	0.19	2.81	MWD
2222.00	10.19	345.20	2197.35	271.80	-78.17	282.82	1.29	-0.81	5.65	MWD
2252.00	10.13	346.45	2226.88	276.93	-79.46	288.11	0.76	-0.20	4.17	MWD
2283.00	10.13	346.83	2257.40	282.24	-80.72	293.55	0.22	0.00	1.23	MWD
2314.00	10.00	346.70	2287.92	287.51	-81.96	298.97	0.43	-0.42	-0.42	MWD
2345.00	10.19	345.08	2318.44	292.78	-83.29	304.40	1.10	0.61	-5.23	MWD
2377.00	10.38	345.58	2349.93	298.31	-84.74	310.11	0.66	0.59	1.56	MWD
2408.00	9.81	342.70	2380.45	303.53	-86.22	315.54	2.46	-1.84	-9.29	MWD
2440.00	9.50	342.58	2412.00	308.66	-87.82	320.91	0.97	-0.97	-0.37	MWD
2470.00	9.56	341.95	2441.58	313.39	-89.33	325.87	0.40	0.20	-2.10	MWD
2502.00	10.00	340.70	2473.12	318.54	-91.07	331.30	1.53	1.37	-3.91	MWD
2534.00	10.44	339.83	2504.61	323.88	-92.99	336.96	1.46	1.37	-2.72	MWD
2565.00	10.50	339.33	2535.09	329.16	-94.96	342.58	0.35	0.19	-1.61	MWD
2596.00	10.44	338.83	2565.58	334.42	-96.97	348.19	0.35	-0.19	-1.61	MWD
2627.00	10.31	340.70	2596.07	339.66	-98.90	353.76	1.16	-0.42	6.03	MWD
2659.00	10.31	341.58	2627.55	345.08	-100.75	359.48	0.49	0.00	2.75	MWD
2689.00	10.50	341.95	2657.06	350.22	-102.45	364.89	0.67	0.63	1.23	MWD
2721.00	10.63	342.70	2688.52	355.81	-104.23	370.76	0.59	0.41	2.34	MWD
2752.00	10.94	343.70	2718.97	361.37	-105.90	376.56	1.17	1.00	3.23	MWD
2784.00	11.06	344.83	2750.38	367.24	-107.56	382.66	0.77	0.37	3.53	MWD
2815.00	11.50	344.95	2780.78	373.10	-109.14	388.73	1.42	1.42	0.39	MWD
2847.00	11.94	344.45	2812.12	379.37	-110.85	395.23	1.41	1.37	-1.56	MWD



Weatherford International, Inc.

Survey Report

Company: WILLIAMS PRODUCTION
Field: Rio Arriba County (NAD 83)
Site: Rosa Unit # 187 C
Well: #187 C
Wellpath: 1

Date: 9/22/2008 Time: 13:46:05 Page: 3
Co-ordinate(NE) Reference: Well: #187 C, True North
Vertical (TVD) Reference: SITE 6815.0
Section (VS) Reference: Well (0.00N,0.00E,344.02Azi)
Survey Calculation Method: Minimum Curvature Db: Sybase

Survey: WFT SVY

MD ft	Incl deg	Azim deg	TVD ft	+N/-S ft	+E/-W ft	VS ft	DLS deg/100ft	Build deg/100ft	Turn deg/100ft	Tool/Comment
2879.00	11.94	344.58	2843.42	385.75	-112.62	401.85	0.08	0.00	0.41	MWD
2910.00	12.13	343.33	2873.74	391.96	-114.41	408.31	1.04	0.61	-4.03	MWD
2942.00	12.25	343.70	2905.02	398.44	-116.33	415.07	0.45	0.37	1.16	MWD
2973.00	12.00	344.08	2935.33	404.69	-118.13	421.58	0.85	-0.81	1.23	MWD
3004.00	11.38	343.83	2965.69	410.73	-119.87	427.86	2.01	-2.00	-0.81	MWD
3035.00	11.31	344.45	2996.08	416.60	-121.54	433.96	0.45	-0.23	2.00	MWD
3067.00	11.38	345.58	3027.45	422.68	-123.16	440.25	0.73	0.22	3.53	MWD
3099.00	11.25	347.45	3058.83	428.78	-124.63	446.52	1.22	-0.41	5.84	MWD
3130.00	10.88	350.20	3089.26	434.62	-125.78	452.45	2.08	-1.19	8.87	MWD
3159.00	10.25	352.95	3117.76	439.87	-126.57	457.72	2.78	-2.17	9.48	MWD
3191.00	9.81	355.45	3149.28	445.42	-127.13	463.20	1.93	-1.37	7.81	MWD
3222.00	9.13	355.83	3179.85	450.50	-127.52	468.20	2.20	-2.19	1.23	MWD
3254.00	8.81	355.83	3211.46	455.48	-127.88	473.08	1.00	-1.00	0.00	MWD
3286.00	8.69	352.70	3243.09	460.32	-128.37	477.87	1.53	-0.37	-9.78	MWD
3317.00	8.75	348.83	3273.73	464.96	-129.12	482.54	1.90	0.19	-12.48	MWD
3349.00	9.13	346.45	3305.34	469.81	-130.19	487.50	1.66	1.19	-7.44	MWD
3380.00	9.63	344.70	3335.93	474.70	-131.45	492.55	1.86	1.61	-5.65	MWD
3412.00	10.31	343.20	3367.44	480.03	-132.98	498.09	2.27	2.12	-4.69	MWD
3444.00	10.19	343.95	3398.93	485.49	-134.59	503.78	0.56	-0.37	2.34	MWD
3474.00	9.44	345.45	3428.49	490.42	-135.94	508.90	2.64	-2.50	5.00	MWD
3505.00	8.31	347.45	3459.12	495.07	-137.07	513.67	3.78	-3.65	6.45	MWD
3536.00	7.00	348.70	3489.85	499.11	-137.93	517.79	4.26	-4.23	4.03	MWD
3568.00	5.69	345.08	3521.65	502.55	-138.72	521.32	4.28	-4.09	-11.31	MWD
3600.00	4.81	336.58	3553.52	505.32	-139.66	524.24	3.66	-2.75	-26.56	MWD
3631.00	4.19	322.08	3584.42	507.40	-140.87	526.58	4.16	-2.00	-46.77	MWD
3663.00	4.00	316.95	3616.34	509.14	-142.35	528.66	1.29	-0.59	-16.03	MWD
3694.00	4.06	317.20	3647.26	510.74	-143.84	530.60	0.20	0.19	0.81	MWD
3726.00	4.13	323.08	3679.18	512.49	-145.30	532.69	1.33	0.22	18.37	MWD
3758.00	4.69	327.83	3711.09	514.52	-146.69	535.02	2.09	1.75	14.84	MWD
3789.00	5.06	335.33	3741.97	516.83	-147.93	537.59	2.37	1.19	24.19	MWD
3821.00	5.38	341.33	3773.84	519.54	-149.00	540.48	1.98	1.00	18.75	MWD
3853.00	5.13	346.83	3805.71	522.35	-149.81	543.41	1.76	-0.78	17.19	MWD
3885.00	5.25	350.45	3837.58	525.19	-150.38	546.29	1.09	0.37	11.31	MWD
3916.00	5.38	353.45	3868.44	528.03	-150.78	549.13	0.99	0.42	9.68	MWD
3948.00	5.56	350.58	3900.30	531.05	-151.20	552.15	1.02	0.56	-8.97	MWD
3980.00	5.44	350.33	3932.15	534.07	-151.71	555.20	0.38	-0.37	-0.78	MWD
4011.00	5.38	348.33	3963.01	536.95	-152.25	558.11	0.64	-0.19	-6.45	MWD
4043.00	5.19	348.95	3994.88	539.84	-152.83	561.05	0.62	-0.59	1.94	MWD
4074.00	4.81	347.45	4025.76	542.48	-153.38	563.74	1.30	-1.23	-4.84	MWD
4105.00	3.56	346.58	4056.67	544.69	-153.89	566.00	4.04	-4.03	-2.81	MWD
4137.00	2.38	334.20	4088.63	546.25	-154.41	567.65	4.18	-3.69	-38.69	MWD
4168.00	1.69	328.45	4119.61	547.22	-154.93	568.73	2.32	-2.23	-18.55	MWD
4199.00	1.25	322.08	4150.60	547.88	-155.38	569.48	1.51	-1.42	-20.55	LAST WFT SVY
4256.00	1.25	322.08	4207.59	548.86	-156.14	570.63	0.00	0.00	0.00	PROJ TO BIT
8770.00	1.50	322.08	8720.28	634.30	-222.71	671.11	0.01	0.01	0.00	LAST RIG SVY

Annotation

MD ft	TVD ft	
4199.00	4150.60	LAST WFT SVY
4256.00	4207.59	PROJ TO BIT
8770.00	8720.28	LAST RIG SVY